ONLINE-ONLY ORIGINAL ARTICLE MYCOLOGY

Online-Only Abstract: Population-based burden of bloodstream infections in Finland

Diagnosis, management and outcome of *Candida* endocarditis

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Abstract

Limited data exist on *Candida* endocarditis (CE) outcome in the era of new antifungals. As early diagnosis of CE remains difficult, non-culture-based tools need to be evaluated. Through the French prospective MYCENDO study (2005–2007), the overall characteristics and risk factors for death from CE were analysed. The contribution of antigen detection (mannan/anti-mannan antibodies and (1,3)-β-D-glucans) and molecular tools was evaluated. Among 30 CE cases, 19 were caused by non-*albicans* species. Sixteen patients (53%) had a predisposing cardiac disease, which was a valvular prosthesis in ten (33%). Nine patients (30%) were intravenous drug users; none of them had right-sided CE. Among the 21 patients who were not intravenous drug users, 18 (86%) had healthcare-associated CE. Initial therapy consisted of a combination of antifungals in 12 of 30 patients (40%). Thirteen patients (43%) underwent valve replacement. The median follow-up was 1 year after discharge from hospital (range, 5 months to 4 years) and hospital mortality was 37%. On univariate analysis, patients aged ≥60 years had a higher mortality risk (OR 11, 95% CI 1.2–103.9; p 0.024), whereas intravenous drug use was associated with a lower risk of death (OR 0.12, 95% CI 0.02–0.7; p 0.03). Among 18 patients screened for both serum mannan/anti-mannan antibodies and (1,3)-β-D-glucans, all had a positive result with at least one of either test at CE diagnosis. Real-time PCR was performed on blood (SeptiFast) in 12 of 18, and this confirmed the blood culture results. In conclusion, CE prognosis remains poor, with a better outcome among younger patients and intravenous drug users. Detection of serum antigens and molecular tools may contribute to earlier CE diagnosis.